

Sequence Listing

SEQ ID NO:1 (Nucleotide coding sequence for AAC74854.1 (ADS1) protein)

1 atgacacctgg tattgaccg gcgtctgaac ggcaaaaaca aaagcatggt gaatgccag
5 61 cgtttttac gccgttataa agcgcaaatt aaacagtcga tctccgaggc cattaataag
121 cgttcggtga ctgacgtcga cagcggcgaa tccgtatcca ttcccacgga agatattagc
181 gaaccgatgt ttcatcaggg gcgtggcggt ctgcgccacc gcgtgcattcc gggcaatgac
241 catttcgtcc agaacgaccg aattgaacgt ccccagggtg gcggcggagg ttccggcagt
301 ggtcaggggcc aggccagcca ggatggtgaa ggtcaggatg aatttgcctt tcagatttcg
10 361 aaagatgagt atcttgatct gctcttcaa gatttgcct taccgaatct gaaacaaaac
421 caacaacgccc agctgaccgaa atataaaacg catcggcggt gttataccgc taacggcggt
481 ccggccaata tcagcggtgt gcgttcatttgc cagaactcac tggcgcgacg cacagccatg
541 acggcaggca agcggcggga acttcatgca ctggaaagaga atttggccat catcagcaac
601 agtgaacctg cgcaactgct ggaagaggaa cgtctgcgca aagaaattgc agaattacgt
15 661 gccaaaatttgc aacgcgtccc ttttatttgc accttcgatt tacgttacaa gaactacgag
721 aagcggcccg atccctccag ccaggcagtgc atgttttgc tgatggacgt ttccgggtca
781 atggatcaat ccactaaaga tatggctaaag cgttttata ttctgctgttca tctgttcctc
841 agcagaacgt ataagaacgt ggaagtcgta tacatccgc accataccca ggcgaaagaa
901 gtcgatgaac atgagttttt ctactcgac gaaacaggcg gcaccattgt ttccagcgcc
20 961 ctgaaaactga tggatgaggt agtggaaagag cgttataacc cggcacagtgc gaatatttac
1021 gctgcacaag catcgacgg cgataactgg gccgatgact ctccgctttgc ccatgaaatc
1081 ctggcgaaaa aattattacc tggatggcg tattacagct atatcgaaat tacccgtcgt
1141 gcacatcaga cattgtggcg agaatatgag catctgcaat ctactttcga caactttgcg
1201 atgcagcaca tccgcgacca ggatgatatt tatccgggtgt tccgtgaact gtttcataaa
25 1261 caaaatgcaa cagctaaagg ctaa

SEQ ID NO:2 (Protein AAC74854.1; ADS1)

1 mtwfidrrln gknksmvnrq rflrrykaqi kgsiseaink rsvtdvdsge svsiptedis
61 epmfhqgrgg lrhrvhpgnd hfvgndrier pqgggggsgs gqqqasqdgge qqdefvfqis
121 kdeyldllfe dlalpnlkqn qqrqlteykt hravytangv panisvvrsl qnslarrtam
30 181 tagkrrelha leenlaiisn sepaqlleee rlrkeiaelr akiervpfid tfdlryknye
241 krpdpssqav mfclmdvsgs mdqstkdma rfyillylfl srtynvevv yirhhtqake

301 vdeheffysq etggtivssa lklmdevvke rympaqwniy aaqasgdgnw addsplchei
361 lakkllpvvr yysyieitrr ahqtlwreye hlqstfdnfa mqhirdqddi ypvfrelfhk
421 qnatakg

SEQ ID NO:3 (the nucleotide coding sequence for AAC76768.1 (ADS2) protein)

5 1 gtgcgcagtc ggctgaaaga tgcccgagtc ccgcggAAC tcaccgaAGA ggtgatgtgc
61 tatacggAAA gcccAGCTCCT ctccACGCCA cAGTTTATTG tgcaGCTACC acAGATCCTG
121 gacttACTGC atCGTCTGAA ttCTCCATGG gcAGAAcAAg CCCGACAGTT ggttGATGCT
181 aacAGCACGA tcACTTCAGC gttACACACG CTTTTCTCC agCGTTGGCG ttAAAGTCTG
241 atCGTGCAG caACGACGTT aaATCAACAG CTATTAGAAG aAGAACGCGA aCAACTGTTG
10 301 agtGAAGTTC aggaACGcat gacGCTGAGC ggacaACTTG aaccGATTCT cgcAGATAAC
361 aataACTGcAG ctggTCGTCT gtgggATATG agcGCCGGTC agCTTAAACG tggcACTAT
421 cAGTTGATTG tgAAATAACGG tgaATTTCtt aacGAACAGC CGGAACtGAA acgcCTGGCA
481 gagcAGCTGG ggcGTTCTCG ggaAGCCAAA tcaATAACCGC gcaACGATGC gcAGATGGAA
541 acCTTCCGCA ccatGGTGCG cgaACCGGCG acggTTCTG agcAGGTTGA tggTCTGCAA
15 601 caaAGCGATG atATTTACG tCTCCTGCCG ccAGAACTGG CGACACTAGG gataACGGAA
661 ctggAGGTATG agTTTACCG tcggCTGGTG gaaaaACAGT tgCTCACCTA tcgcCTGcAC
721 ggtGAGTCGT ggcGTgAAAA agtGATCGAA cgtCCGGTGG tacataAAAGA ttacGATGAA
781 cagCCGCGCG ggcGTTTAT tgcTGTGTG gataACTCCG gctCAATGGG cggCTTAAAT
841 gaACAGTGTG cgaAAAGCGTT ctgcCTGGCC ttgatGCGCA ttgCTCTCGC agAAAACCGG
20 901 cgCTGCTATA ttATGCTATT ttCCACCGAG atCGTCCGTT atGAGCTTTC aggCCCAcAA
961 ggcATCGAAC aAGCAATCCG tttttAAAGC cAGCAGTTc gtggCGGcAC cGATCTGcC
1021 agttGTTTC ggcCATTAT ggaACGCTTG cAAAGCAGGG aATGGTTGA tgccGATGCG
1081 gtggTGATTt ctgATTTAT cgCTCAGCGG ttgcCTGACG acGTGACGAG taaAGTgAAA
1141 gagCTGcAGC gggTACATCA gcatGCTTT catGCCGTGG cGATGTCGGC acACGGcAAA
25 1201 cccGGcATCA tgcGcATTt cGATCATATC tggcGCTTtG atACCggGAT gCGAAGCCGc
1261 ctgCTCAGAC gctggCGGCG atAA

SEQ ID NO: 4 (Protein AAC76768.1; ADS2)

1 mrsrlkdav ppelteevmc yqqsqlstp qfivqlpqil dllhrlnspw aeqarqlvda
61 nstitsalht lflqrwrlsl ivqattlnqq lleeereqll sevgermtls gqlepiladn
30 121 ntaagrlwdm sagqlkrgdy qlivkygefl neqpelkrla eqlgrsreak sипrndaqme
181 tfrtmvrepa tvpeqvdglq qsddilrlp pelatlgite leyefyrrlv ekalltyvrh

241 geswrekvie rpvvhkdyde qprgpifivcv dtsgsmggfn eqcakafcla lmrialaenr
301 rcyimlfste ivryelsgpq gieqairfls qqfrggttdla scfraimerl qsrewfdada
361 vvisdfiaqr lpddvtksvk elqrvhqhrf havamsahgk pgimrifdhi wrfdtgmrssr
421 llrrwrr

5 SEQ ID NO: 5 (Nucleotide coding sequence for P10155 (ADS5) protein)

1 atttgcctt tttgttaggt ttcctaaaga caaaaaaaaaa tggaggaatc tgtaaaccaa
61 atgcagccac tgaatgagaa gcagatagcc aattctcagg atggatatgt atggcaagtc
121 actgacatga atcgactaca ccggttctta tgttcgggtt ctgaagggtgg gacttattat
181 atcaaagaac agaagttggg cttgaaaat gctgaagctt taatttagatt gattgaagat
10 241 ggcagaggat gtgaagtgtat acaagaaata aagtcatatgtt gtcaagaagg cagaaccaca
301 aagcaagagc ctatgctctt tgcacttgcc atttgttccc agtgctccga cataaggcaca
361 aaacaagcag cattaaagc tgtttctgaa gtttgcgca ttcctaccca tctctttact
421 tttatccagt ttaagaaaga tctgaaggaa agcatgaaat gtggcatgtg gggcgtgccc
481 ctccggaagg ctatagcgga ctggtacaat gagaagggtg gcatggccct tgctctggca
15 541 gttacaaaat ataaacacagaaatggctgg tctcacaaag atctattaag attgtcacat
601 cttaaacctt ccagtgaagg acttgcaatt gtgaccaat atattacaaa gggctggaaa
661 gaagttcatg aattgtataa agaaaaagca ctctctgtgg agactgaaaa attattaaag
721 tatctggagg ctgttagagaa agtgaagcgc aaaaaagatg agctagaagt cattcatcta
781 atagaagaac atagattagt tagagaacat ctttaacaa atcacttaaa gtctaaagag
20 841 gtatggaagg cttgttaca agaaatgccg cttactgcat tactaaggaa tctaggaaag
901 atgactgcta attcagtact tgaaccagga aattcagaag tatcttttagt atgtgaaaaa
961 ctgtgtatg aaaaactatt aaaaaaggct cgtatacatc catttcataat tttgatcgca
1021 ttagaaactt acaagacagg tcatggtctc agagggaaac tgaagtggcg ccctgatgaa
1081 gaaatttga aagcattgga tgctgcttt tataaaacat ttaagacagt tgaaccaact
25 1141 ggaaaacgtt tcttacttagc tggtgatgtc agtgcttcta tgaaccaaag agttttgggt
1201 agtatactca acgcttagtac agttgctgca gcaatgtgca tggttgtcac acgaacagaa
1261 aaagattctt atgttagttgc ttttccgat gaaatggta catgtccagt gactacagat
1321 atgaccttac aacaggtttt aatggctatg agtcagatcc cagcagggtgg aactgattgc
1381 tctcttccaa tgatctggc tcaagaagaca aacacacctg ctgatgtctt cattgtattc
30 1441 actgataatg agaccttgc tggaggtgtc catcctgcta ttgctctgag ggagtatcga
1501 aagaaaatgg atattccagc taaattgatt gtttggaa tgacatcaa tggttcacc

1561 attgcagacc cagatgatag aggcatgtt gatatgtcg gctttgatac tggagctctg
1621 gatgttaattc gaaatttcac attagatatg atttaaccat aagcagcagc acgateccaga
1681 gatccattgc catcagtatc ctcactaaaa aatatacagc tacttccca ctaatctcca
1741 cccaatgaat gatgatggta tagtatgtgc ataatggaaa gttaccttac tg

5 SEQ ID NO: 6 (Protein P10155 (ADS5))

1 meesvnqmqp lnekqiansq dgyvwqvtdm nrlhrflcfg seggtyyike qklglennaea
61 lirliedgrg ceviqeiksf sqegrttkqe pmlfalaics qcsdistkqa afkavsevcr
121 ipthlftfiq fkkdlkesmk cgmwgralrk aiadwynekg gmalalavtk ykqrngwshk
181 dllrlshlkp sseglaivtk yitkgwkevh elykekalsv etekllkyle avekvkrtkd
10 241 elevihliie hrlvrehllt nhlkskevwk allqemplta llrnlgkmta nsvlepgnse
301 vslvceklcn ekllkkarih pfhilialet yktghglrgk lkwrpdeeil kaldaafykt
361 fktveptgkr fllavdvsas mnqrvlgsil nastvaaamc mvvtrtekds yvvafsdemv
421 pcpvtttdmtl qqvlmamsqi paggtcdcslp miwaqktntp advfivftdn etfaggvhpa
481 ialreyrkkm dipaklivcg mtsngftiad pddrgmldmc gfdtgaldvi rnftldmi